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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,284	10/14/2003	Thomas E. Chefalas	YOR920010713US1	7091

29683 7590 04/29/2008
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EXAMINER	
THOMAS, JASON M	
ART UNIT	**PAPER NUMBER**
2623	
MAIL DATE	**DELIVERY MODE**
04/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/686,284	CHEFALAS ET AL.	
	Examiner	Art Unit	
	Jason Thomas	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 January 2008_.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _13-18 and 21-28_ is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _13-18 and 21-28_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on _14 October 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date ____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. Examiner has acknowledged amendments submitted January 22, 2008.

   a. Claims 1-12, 19 and 20 have been cancelled.

   b. Claims 13, 15, 17-18 and 21 have been amended.

   c. Claims 24-28 are new.

Response to Arguments

2. Applicant's arguments with respect to claim 13-23 have been considered but are moot in view of the new ground(s) of rejection.

> Regarding applicant's assertion that a signal comprising an "info segment", which specifies "interruption points", is not analogous to a "cohesive signal" as defined in lines 10-12 of the specification, Lowthert teaches a cohesive signal set. By definition as explicitly set forth in the specification, "a cohesive signal set is a group of interrelated electronic signals that in combination constitute a human recognizable expression." These three criteria are met in Lowthert's disclosure. Lowthert teaches electronic signals (see [0019], [0048] data delivery mechanisms such as down-the-wire or over-the-airwaves) comprising a group of interrelated electronic signals such as info segments, content items, ad entries, pointers, etc. which are combined under the explicit definition of a "program"; also referred to as a data stream (see [fig. 2-6], [0008],

[0011], [0012] for a group of interrelated signals and three embodiments of the interrelated signals which constitute a program; see also [0029] for a program also understood to represent a data stream). Finally Lowthert teaches that the end product when viewed from the receiving device is a human recognizable expression (see [0019] where it is inherent that the user view and recognize the end product to be able to enjoy the entertainment content).

Regarding the assertion that the program is separate from the info segment, in the paragraph used to suggest that the info segment is not taught as being inserted into the program (see [fig. 6] for an info segment pointer or [0039] where Lowthert teaches an alternative embodiment where the info segment is not actually inserted) the very same paragraph also states that in Fig. 5 it was assumed that the info segment is captured by the receiver, in one scenario, immediately when the viewer tunes into a program which is supported by the Fig. 2 and Fig. 5 where the info segment is depicted as embedded into the programming.

Lowthert also teaches that the elements which applicant describes as “(separate) elements in Figure 1 of Lowthert” may be constructed to share a common storage element, such that the phrase "server" is used by way of illustration (see [0025], [0026], [0027], [0050] for a single entity which would send a single data stream or by definition a cohesive signal set).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Lowthert et al. (U.S. Pre- Grant Pub No. 2002/0100034 A1).

Regarding amended claim 21: Lowthert discloses a method of sequencing at least two disparate cohesive signal sets (see [0008], [0032] for ad insertion).

Lowthert further discloses transmitting a first signal set at a first time, said first cohesive signal set including an electronic cache marker and an electronic instruction to the local storage cache to retain said first cohesive signal set in a local cache (see [figs. 2-4], [0025], [0030], [0039], [0048] where an info segment which includes an info segment header and can be linked to a content identifier where a series of executable instructions enable it to be stored on the local device if necessary).

Lowthert further discloses transmitting a second cohesive signal set at a second time, said second cohesive signal set including an electronic recall marker that uniquely identifies the cache marker of the first cohesive signal set (see [fig. 6], [0039] for unique identification using pointers) and that directs a receiver to sequence said first cohesive signal set with said second cohesive signal set when said second cohesive signal set is output from the receiver (see [0029], [0030], [0032], [0039] where the program data stream includes a info data segment header which can be sequenced in any order when output from the receiver).

Regarding original claims 22 and 23: Lowthert discloses all of the limitations of 21 including transmitting over a wireless and/or cable link (see [0024], [0048] for transmitting over a wireless and/or cable link).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 13, 16-17 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowthert et al. in view of Wachtfogel et al (U.S. Patent No. 7,340,760 B2).

Regarding amended claim 13: Lowthert discloses a method for time-shifting at least one of a plurality of received cohesive signal sets (see [0008], [0029], [0032] for time shifting by way of interrupting the play of a program data stream to insert an info segment), comprising: receiving a first cohesive signal set comprising a cache marker at a first time (see [0009], [0030], [0031] for using an info segment and ad entry headers which is located in the info segment);

based on the presence of the cache marker, automatically storing said first cohesive signal set in a computer readable storage medium (see [0009], [0025], [0030], [0039] where an info segment is automatically stored by the controller in the local storage provided in the receiver based upon the presence of an info segment header); receiving a second cohesive signal set comprising a recall marker at a second time (see [0032], [0033], [0034], [0043] for using interrupt point identification in a program data stream); and in response to a user request for the second cohesive signal set, using the recall marker to identify the cache marker of the first cohesive signal set and outputting the requested second cohesive signal set and the first cohesive signal set in a timed relation relative to one another that differs from a timed relation in which they were received, wherein the output timed relation is determined by the recall marker(see [0029], [0030], [0032] where the use of a interruption point identifier within a program data stream is used to identify an info segment header within a data segment which is then time-shifted upon a user's request see [0034] also see [0045] where it is demonstrated that a user can control the receiver via a remote control).

Lowthert does not explicitly teach matching of the recall marker to the cache marker.

Wachtfogel teaches uniquely matching a type of recall marker to a type of cache marker (see [col. 2, ll. 24-65], [col. 4, ll. 28-43], [col. 6, ll. 15-34] for tag data that is analogous to a recall marker in that it designates the type of tag, with the associated advertisement, determined to be a valid replacement to fill a specific location in the broadcast stream).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art that data, such as metadata in the form of a tag associated with an advertisement, used to indicate the location and placement criteria for placing a valid advertisement can be matched with a tag and associated advertisement, meeting the placement criteria, as taught in Wachtfogel, when selecting an advertisement from a set of one or more advertisement entries, as taught in Lowthert, because by matching an advertisement used to fill the advertisement segment with an advertisement that matches predefined characteristics, such as having similar advertised items, allows the broadcaster to provide a wider selection of a plurality of vendors for the user to choose from offering similar items and as a result be able to obtain greater revenue by selecting a leading vendor (see [col. 23, ll. 37-46]).

Regarding original claim 16: Lowthert discloses all of the methods of claim 13 including where outputting said portion comprises outputting said portion as received without storing said portion (see [0039] where the outputting said portion is fetched by the receiver via a URL or the like without storing it or see [0043] where the outputting said portion is fetched on the fly).

Regarding original claim 17: Lowthert discloses all of the methods of claim 13 including where each of said cache marker and recall marker further comprises a sponsor identifier, and using the recall marker to identify the first signal set comprising the cache marker includes matching said sponsor identifier (see [0025], [0032], [0035] where based upon a permitted ad type identifier a sponsor or advertiser, such as the respective examples Disney or Marlboro, make use of the info segment header and the interruption point identifier as instructed by the controller to access the info segment as indicated by the program data stream which contains the interruption point identifier).

Regarding new claim 24: Lowthert discloses the method of claim 13, including wherein the cache marker uniquely identifies the first cohesive signal set of which it comprises (see [figs. 2 & 3] [0008-0009], [0029] where the info segment header specifies with which content item it is associated).

Lowthert does not teach wherein the recall marker uniquely matches the cache marker.

Wachtfogel teaches uniquely matching a type of recall marker to a type of cache marker (see [col. 2, ll. 24-65], [col. 4, ll. 28-43], [col. 6, ll. 15-34] for tag data that is analogous to a recall marker in that it designates the type of tag, with the associated advertisement, determined to be a valid replacement to fill a location in the broadcast stream uniquely matching with a leading vendor).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art that data, such as metadata in the form of a tag associated with an advertisement, used to indicate the location and placement criteria for placing a valid advertisement can be matched with a tag and associated advertisement, meeting the placement criteria, as taught in

Wachtfogel, when selecting an advertisement from a set of one or more advertisement entries, as taught in Lowthert, because by matching an advertisement used to fill the advertisement segment with an advertisement that matches predefined characteristics, such as having similar advertised items, allows the broadcaster to provide a wider selection of a plurality of vendors for the user to choose from offering similar items and as a result be able to obtain greater revenue by selecting a leading vendor (see [col. 23, ll. 37-46]).

Regarding new claim 25: Lowthert discloses the method of claim 13, including wherein the first cohesive signal set comprising a commercial advertisement (see [fig. 2], [fig. 3], [fig. 4], [fig. 5] for program streams containing ads (commercials); see also [0039] for capturing an info segment which contains ads (commercials) immediately when the viewer tunes into a program).

Regarding new claim 26: Lowthert does not teach wherein the cache marker comprises a product classification; the recall marker comprises a product classification; and matching the recall marker to said cache marker comprises matching the product classification.

Wachtfogel teaches matching a type of recall marker to a type of cache marker both of which comprise a product classification (see [fig. 5], [fig. 6], [fig. 8], [col. 2, ll. 29-63], [col. 28-43], [col. 6, ll. 15-33], [col. 24, ll. 29-34] for matching predefined criteria listed in the metadata in the form of a tag which contains the advertisement's product classification).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art that data, such as metadata in the form of a tag associated with an advertisement, used to indicate the location and placement criteria for placing a valid advertisement can be matched with a tag and associated advertisement, meeting the placement criteria, as taught in Wachtfogel, when selecting an advertisement from a set of one or more advertisement entries, as taught in Lowthert, because by matching an advertisement used to fill the advertisement segment with an advertisement that matches predefined characteristics, such as having similar advertised items (products), allows the broadcaster to provide a wider selection of a plurality of vendors for the user to choose from offering similar items and as a result be able to obtain greater revenue by selecting a leading vendor (see [col. 23, ll. 37-46]).

3. Claims 14, 15, 18, 27 and 28 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowthert et al. view of Wachtfogel et al. and Picco et al. (US Pat. 6,029,045).

Regarding original claim 14: while Lowthert discloses all of the limitations in claim 13, Lowthert does not teach a received timed relation that is at least two orders of magnitude greater than said output timed relation.

Picco however, teaches a trickle technique where the amount of time required for receiving content may take up to a night, several days or even several weeks (see [col. 9, ll. 1-39]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use other methods to retrieve content such a technique involving using unused bandwidth to retrieve programming while the receiver is not being used to view television which as a result causes lengthy downloads requiring download times that exceed double the output time (see [col. 9, ll. 48-51]).

Regarding original claim 15: Lowthert discloses all of the limitations in claim 13, but does not teach receiving said first and second cohesive signal sets over different channels.

Picco however, teaches receiving segments of content that are downloaded over different channels (see [col. 3, ll. 24]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the device, as taught by Lowthert, to include two tuners, as taught by Picco, which would enable a user to receive signal sets over different channels because a second tuner would allow, as was commonly practiced at the time of the invention, the viewing of picture-in-picture or the recording of a second channel while viewing a first channel (see [fig. 8]; see also [col. 9. ll. 31-37]).

Regarding amended claim 18: Lowthert discloses all of the limitation in claim 13, but does not teach the use of a priority code with said cache marker that directs said CPU to store said first cohesive signal set and delete another cohesive signal set bearing a similar cache marker comprising a lower priority code.

Picco however, teaches the use of a content profile which includes unique attributes including such attributes as: an expiration date; or a maximum number of times a piece of local content may be viewed (see [col. 6, ll. 61 through col. 7. ll. 2]). These attributes can then be used to determine or prioritize when the local content may be overwritten or removed based on combined factors (see [col. 10, ll. 62 through col. 11, ll. 1]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to include such storage utilization directives, to eliminate content which is not being utilized or outdated as taught by Picco, when using the storage where info segment content is maintained as taught in Lowthert, because with limited space, it is important to optimizing the available storage used to hold content by overwriting and deleting low priority or expired content.

Regarding new claim 27: Lowthert discloses the method of claim 13, but does not teach wherein the first cohesive signal set further comprises a priority code, and wherein storing further comprises removing another cohesive signal set with a lower priority code from the computer readable storage medium.

Picco however, teaches the use of a content profile which includes unique attributes including such attributes as: an expiration date; or a maximum number of times a piece of local content may be viewed (see [col. 6, ll. 61 through col. 7. ll. 2]). These attributes can then be used to determine or prioritize when the local content may be overwritten or removed based on combined factors (see [col. 10, ll. 62 through col. 11, ll. 1]).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to include such storage utilization directives, to eliminate content which is not being utilized or outdated as taught by Picco, when using the storage where info segment content is maintained as taught in Lowthert, because with limited space, it is important to optimizing the available storage used to hold content by overwriting and deleting low priority or expired content.

Regarding new claim 28: Lowthert discloses the method of claim 27, but does not teach wherein the priority code is a date/time stamp.

Picco teaches a data/time stamp (see [col. 10, ll. 62 through col. 11, ll. 1] for a date stamp which maintains the time when content will expire and also a time stamp which maintains the times which content may be viewed).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a date/time stamp, as taught in Picco, when storing content for later viewing, as taught in Lowthert, because with limited space, it is important to optimizing the available storage used to hold content by overwriting and deleting content such as advertisements that have expired and are no longer relevant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2623